

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 4-6 and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Roberts (6525274).

Re claim 4, Roberts discloses a polymer insulator apparatus comprising a rigidly and unrotatably connected rectangular structure (see column 2 lines 36-37 according to the numbering in the middle for example) comprising plural polymer post insulators (51, 53 for example), a supporting structure (base assembly 31 for example) and a plate member (64 for example) including a conductor mounting portion of the plate member (see figure 1 for example) comprising a substantially longitudinal portion configured for supporting an electric power transmission line connected to and supported by a plurality of said supporting structures (see column 1 lines 22-24 for example), wherein a first end of each polymer post insulator is rigidly and unrotatably connected to said supporting structure, and a second end of each said polymer post

insulator is rigidly and unrotatably connected to said plate member, (see figure 1, column 2 lines 52-54 for example).

Re claim 5, Roberts discloses a method for mounting plural polymer post insulators on a supporting structure, comprising: providing a supporting structure (31 for example), a plate member (64 for example) including a conductor mounting portion of the plate member comprising a substantially longitudinal portion configured for supporting an electric power transmission line connected to and supported by a plurality of said supporting structures, and plural polymer post insulators;

rigidly and unrotatably connecting a first end of each said plural polymer post insulator to the supporting structure; and rigidly and unrotatably connecting a second end of each said plural polymer post insulator to said plate member (see column 3 lines 63-67 for example) whereby said plural polymer post insulators are parallel to each other and normal to the supporting structure, thereby forming a rigidly and unrotatably connected rectangular structure (see figure 1 for example). Note that it has been held that the functional “whereby” statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

Re claim 6, Roberts discloses a method wherein said first end of each said polymer post insulator is connected to said supporting structure by a first rigid body (55, 59 for example) comprising a part of said polymer post insulator, and said second end of each said polymer post insulator is connected fixedly to said plate member by a second rigid body (57, 61 for example) comprising a part of said polymer post insulator (see figure 1 for example).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8, 11 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Locke (US000872569).

Re claim 8, Roberts substantially discloses a method as set forth in claim 5 above except wherein when an axial direction along a length of each said plural polymer post insulator is substantially a horizontal direction and an axial direction along a length of said supporting structure is substantially a vertical direction, then said plural polymer post insulators are for supporting a weight of a load of an electric power transmission line acting in the vertical direction. However, Locke teaches of wherein when an axial direction along a length of each said plural polymer post insulator is substantially a horizontal direction and an axial direction along a length of said supporting structure is substantially a vertical direction, then said plural polymer post insulators are for supporting a weight of a load of a conductor acting in the vertical direction (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use arrangement of Locke with the insulators of Roberts in order to provide the vertical arrangement.

Re claim 11, Roberts substantially discloses a polymer insulator apparatus comprising a rigidly and unrotatably connected rectangular structure comprising plural

polymer post insulators, a supporting structure and a plate member including a conductor mounting portion of the plate member comprising a substantially longitudinal portion configured for supporting an electric power transmission line connected to and supported by a plurality of said supporting structures, wherein a first end of each polymer post insulator is rigidly and unrotatably connected to said supporting structure, and a second end of each said polymer post insulators is rigidly and unrotatably connected to said plate member. Roberts does not explicitly disclose wherein said supporting structure is selected from the group consisting of a steel pole, a wood pole or a steel tower. However, Locke teaches of supporting structure selected from the group consisting of a steel pole, a wood pole or a steel tower (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use supporting structure selected from the group consisting of a steel pole, a wood pole or a steel tower of Locke with the insulators of Roberts in order to place the insulators on the particular supporting structure.

Re claim 12, Roberts substantially discloses a method for mounting plural polymer post insulators on a supporting structure, comprising: providing a supporting structure, a plate member including a conductor mounting portion of the plate member comprising a substantially longitudinal portion configured for supporting an electric power transmission line connected to and supported by a plurality of said supporting structures, and plural polymer post insulators;

rigidly and unrotatably connecting a first end of each said plural polymer post insulator to the supporting structure; and rigidly and unrotatably connecting a second

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end of each said plural polymer post insulator to said plate member whereby said plural polymer post insulators are parallel to each other and normal to the supporting structure, thereby forming a rigidly and unrotatably connected rectangular structure.

Roberts does not explicitly disclose wherein said supporting structure is selected from the group consisting of a steel pole, a wood pole or a steel tower. However, Locke teaches of supporting structure selected from the group consisting of a steel pole, a wood pole or a steel tower (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use supporting structure selected from the group consisting of a steel pole, a wood pole or a steel tower of Locke with the insulators of Roberts in order to place the insulators on the particular supporting structure. Note that it has been held that the functional “whereby” statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

Re claim 13, Roberts substantially discloses an apparatus as set forth in claim 4 above except wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical. However, Locke teaches of wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical arrangement of Locke with the insulators of Roberts in order to provide the vertically arranged insulators.

Re claim 14, note that Locke discloses wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical.

Re claim 15, Roberts substantially discloses a method as set forth in claim 5 above except wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical. However, Locke teaches of wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical arrangement of Locke with the insulators of Roberts in order to provide the vertically arranged insulators.

Re claim 16, note that Locke discloses wherein the supporting structure to which the first ends of the polymer post insulators are connected, is substantially vertical.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 4-6, 8-16 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J. Lee whose telephone number is 571-272-1977. The examiner can normally be reached on M-F at 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-2100 ext. 74. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jinhee J Lee/  
Primary Examiner, Art Unit 2174

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